## I. Listing of Claims

Please amend the claims as follows (the changes in these claims are shown with strikethrough for deleted text and <u>underlines</u> for added text). A complete listing of the claims is listed below with proper claim identifiers. This listing of claims will replace all prior versions, and listings, of claims in the application.

## What is claimed is:

1. (Currently Amended) A modulator compound of the structure (I), or a salt thereof:

$$R^4$$
 $CH_3$ 
 $R^6$ 
 $R^5$ 
 $(CH_3)$ 
 $R^6$ 
 $(I)$ 

where m is an integer from 1 to 5;

each Y is independently selected from the group consisting of hydrogen, halogen, -CN, -NO<sub>2</sub>, -OH, -OR', -C(O)R', -CO<sub>2</sub>R', -O(CO)R', -C(O)NR'R", -OC(O)NR'R", -SR', -SOR', -SO<sub>2</sub>R', -SO<sub>2</sub>NR'R", -NR'R", -NR'C(O)R", -NR'C(O)<sub>2</sub>R", -NR'SO<sub>2</sub>R", -NR'(CO)NR"R", unsubstituted or substituted  $C_{1-8}$  alkyl, unsubstituted or substituted  $C_{2-8}$  alkenyl, unsubstituted or substituted  $C_{2-8}$  alkynyl, unsubstituted or substituted  $C_{3-8}$  cycloalkyl, and unsubstituted or substituted  $C_{6-10}$  aryl;

where each R', R" and R" are each independently from the group consisting of: hydrogen, halogen, unsubstituted or substituted  $C_{1-8}$  alkyl, and unsubstituted or substituted  $C_{6-10}$  aryl;

n is 0, 1, 2 or 3;

Z is a substituted or unsubstituted group of the formulae:

where  $R^7$  is selected from the group consisting of hydrogen, -C(O)R',  $-CO_2R'$ , -C(O)NR'R",  $-SO_2R'$ , unsubstituted or substituted  $C_{1-10}$  alkyl, unsubstituted or substituted  $C_{1-8}$  alkoxyl, unsubstituted or substituted  $C_{2-10}$  alkenyl, unsubstituted or substituted  $C_{2-10}$  alkynyl, unsubstituted or substituted  $C_{3-10}$  cycloalkyl, unsubstituted or substituted  $C_{6-10}$  aryl, and  $C_{6-10}$  aryloxy, where each R', R" and R" are each independently from the group consisting of: hydrogen, halogen, unsubstituted or substituted  $C_{1-8}$  alkyl, and unsubstituted or substituted  $C_{6-10}$  aryl;

R<sup>6</sup> is alkyl, hydrogen, or halogen; and

 $R^3$ ,  $R^4$ , and  $R^5$  are each independently selected from the group consisting of hydrogen, halogen, -CN, -NO<sub>2</sub>, -OH, -OR', -C(O)R', -CO<sub>2</sub>R', -O(CO)R', -C(O)NR'R", -OC(O)NR'R", -SR', -SOR', -SO<sub>2</sub>R', -SO<sub>2</sub>NR'R", -NR'R", -NR'C(O)R", -NR'C(O)<sub>2</sub>R", -NR'SO<sub>2</sub>R", -NR'(CO)NR"R", unsubstituted or substituted  $C_{1-8}$  alkyl, unsubstituted or substituted  $C_{2-8}$  alkenyl, unsubstituted or substituted or sub

- 2. (Currently Amended) The modulator compound of claim 1, where R<sup>6</sup> is hydrogen.
- 3. (Currently Amended) The  $\frac{1}{100}$  modulator  $\frac{1}{100}$  of claim 1, where  $\frac{1}{100}$  is substituted or unsubstituted  $\frac{1}{100}$  alkyl.
- 4. (Currently Amended) The modulator compound of claim 1, where R<sup>6</sup> is halogen.
- 5. (Currently Amended) The modulator compound of claim 1, where  $R^3$ ,  $R^4$ , and  $R^5$  are each independently selected from the group consisting of hydrogen, -OR', and substituted or unsubstituted  $C_{1-8}$  alkyl.
- 6. (Currently Amended) The modulator compound of claim 1, where  $R^3$ ,  $R^4$ , and  $R^5$  are each independently selected from the group consisting of -OR' and hydrogen.
- 7. (Currently Amended) The modulator compound of claim 1, where  $R^3$ ,  $R^4$ , and  $R^5$  are each –OR', where R' is substituted  $C_{1-8}$  alkyl.
  - 8. (Canceled)
  - 9. (Canceled)

- 10. (Cancelled)
- 11. (Cancelled)
- 12. (Cancelled)
- 13. (Cancelled)
- 14. (Currently Amended) The modulator compound of claim 1, where Z is a substituted or unsubstituted group of the formula:

15. (Currently Amended) The modulator compound of claim 1, where Z is a substituted or unsubstituted group of the formula:

- 16. (Canceled)
- 17. (Canceled)
- 18. (Canceled)
- 19. (Currently Amended) The modulator compound of claim 1, where Z is a substituted or unsubstituted group of the formula:

where  $R^7$  is selected from the group consisting of hydrogen, -C(O)R', -CO<sub>2</sub>R', -C(O)NR'R", -SO<sub>2</sub>R', unsubstituted or substituted C<sub>1-10</sub> alkyl, unsubstituted or substituted C<sub>1-8</sub> alkoxyl, unsubstituted or substituted C<sub>2-10</sub> alkenyl, unsubstituted or substituted C<sub>2-10</sub> alkynyl, unsubstituted or substituted C<sub>3-10</sub> cycloalkyl, unsubstituted or substituted C<sub>6-10</sub> aryl, and C<sub>6-10</sub> aryloxy.

- 20. (Currently Amended) The modulator compound of claim 1, where  $R^7$  is substituted or unsubstituted  $C_{1-10}$  alkyl, substituted or unsubstituted  $C_{1-10}$  alkoxy, substituted or unsubstituted aryloxy, or substituted or unsubstituted  $C_{3-10}$  cycloalkyl.
- 21. (Currently Amended) The modulator compound of claim 1, where n is 1, 2, or 3.
- 22. (Currently Amended) The modulator compound of claim 1, where m is 1 or 2, and each Y is a halogen.
  - 23. (Currently Amended) The modulator compound of claim 1, where m is 0.
- 24. (Currently Amended) The <u>modulator compound</u> of claim 1, where substituted alkyl, substituted alkenyl, substituted alkynyl and substituted cycloalkyl can each independently be substituted 1 to 3 times with halogen, -OR', -NR'R", -SR', -

SiR'R"R", -OC(O)R', -C(O)R', -CO<sub>2</sub>R', -CONR'R", -OC(O)NR'R", -NR"C(O)R', -NR'-C(O)NR"R", -NR"C(O)<sub>2</sub>R', -S(O)<sub>2</sub>R', -S(O)<sub>2</sub>R', -S(O)<sub>2</sub>NR'R", -NR'S(O)<sub>2</sub>R", -CN, oxo (=O or –O-) or -NO<sub>2</sub>, where R', R" and R" each are independently selected from the group consisting of hydrogen, halogen, unsubstituted  $C_{1-8}$  alkyl, unsubstituted  $C_{3-6}$  cycloalkyl, unsubstituted  $C_{2-8}$  alkenyl, unsubstituted or  $C_{2-8}$  alkynyl, and unsubstituted aryl.

- 25. (Currently Amended) The modulator compound of claim 1, where substituted aryl can each independently be substituted 1 to 3 times with halogen, unsubstituted or substituted alkyl, unsubstituted or substituted alkenyl, unsubstituted or substituted alkenyl, unsubstituted or substituted alkynyl, unsubstituted or substituted cycloalkyl, -OR', oxo (=O or -O), -OC(O)R', -NR'R", -SR', -R', -CN, -NO<sub>2</sub>, -CO<sub>2</sub>R', -CONR'R", -C(O)R', -OC(O)NR'R", -NR"C(O)R', -NR"C(O)<sub>2</sub>R', -NR'-C(O)NR"R"', -NH-C(NH<sub>2</sub>)=NH, -NR'C(NH<sub>2</sub>)=NH, -NH-C(NH<sub>2</sub>)=NR', -S(O)R', -S(O)<sub>2</sub>R', -S(O)<sub>2</sub>NR'R", -NR'S(O)<sub>2</sub>R" and -N<sub>3</sub>, where R', R" and R" are independently selected from the group consisting of hydrogen, halogen, unsubstituted C<sub>1-8</sub> alkyl, unsubstituted C<sub>3-6</sub> cycloalkyl, unsubstituted C<sub>2-8</sub> alkenyl, unsubstituted or substituted aryl.
- 26. (Currently Amended) The modulator compound of claim 1, where substituted heterocyclyl can be substituted 1 to 3 times with halogen, unsubstituted or substituted alkenyl, unsubstituted or substituted alkenyl, unsubstituted or substituted alkynyl, unsubstituted or substituted cycloalkyl, -OR', oxo (=O or -O), -OC(O)R', -NR'R", -SR', -R', -CN, -NO<sub>2</sub>, -OC(O)NR'R", -NR"C(O)R', -NR"C(O)<sub>2</sub>R', -NR'-C(O)NR"R"', -NH-C(NH<sub>2</sub>)=NH, -NR'C(NH<sub>2</sub>)=NH, -NH-C(NH<sub>2</sub>)=NR', -S(O)R', -S(O)<sub>2</sub>NR'R", -NR'S(O)<sub>2</sub>R" and -N<sub>3</sub>, where R', R" and R"' are independently selected from the group

consisting of hydrogen, halogen, unsubstituted  $C_{1-8}$  alkyl, unsubstituted or  $C_{3-6}$  cycloalkyl, unsubstituted  $C_{2-8}$  alkenyl, unsubstituted  $C_{2-8}$  alkenyl, unsubstituted aryl.

## 27. (Currently Amended) A modulator compound having the structure (II):

$$R^4$$
 $R^5$ 
 $NR^7$ 
 $NR^7$ 
 $NR^7$ 
 $(II)$ 

where n=1;

where each Y is independently hydrogen or halogen;

R<sup>3</sup>, R<sup>4</sup>, and R<sup>5</sup> are each independently selected from the group consisting of hydrogen, halogen, and -OR'; and

 $R^7$  is selected from the group consisting of hydrogen, -C(O)R',  $-CO_2R'$ , -C(O)NR'R'',  $-SO_2R'$ , unsubstituted or substituted  $C_{1-8}$  alkyl (optionally  $C_{1-8}$  alkoxyalkyloxy,  $CH_2CH_2OCH_2CH_2OMe$ )alkyl, unsubstituted or substituted  $C_{2-8}$  alkenyl, unsubstituted or substituted  $C_{2-8}$  alkynyl, unsubstituted or substituted  $C_{3-8}$  cycloalkyl, and unsubstituted or substituted  $C_{6-10}$  arylwhere each R', R'' and R''' are each independently from the group consisting of: hydrogen, halogen, unsubstituted or substituted  $C_{1-8}$  alkyl, and unsubstituted or substituted  $C_{6-10}$  aryl.

- 28. (Currently Amended) The  $\frac{1}{1-8}$  alkoxyalkyloxy.
  - 29. (Canceled)
- 30. (Currently Amended) A modulator compound comprising one of the following formulae:

1	51	
2	52	
3	53	
4	54	FP N N N F
5		
6	56	
	57	

8	Br. N-	58	
9	<u>~</u>		
10	Ç~-	60	, Çn~O
		61	
12	, ONH	62	,CF <sub>3</sub>
			F <sub>3</sub> C N
13			
14	, Çn-	64	-9 J. ~ O
15	_o NH	65	L2 1,11 ~~~
16	, NH		
17	-0-11/N	67	F-L <sub>Q</sub> , , , , , , , , , , , , , , , , , , ,

18	~ <sub>0</sub> ~	68	~
			5000
	ĺ		
20	`v\I\`		
21	N → OH	71	Ç.V-←
			1
23	Q	73	
	1	74	<u>Ç</u> \-♦
		75	$\bigcirc$ N $\rightarrow$
			F-O-D-F
			F
27	-o_ NH		
28			
29			
30			

	I F		
31			
32	-0 50-		
33		83	
34	> NH		
35	-o NH NH NH F		
36			
30	NH PF		
37	-0 IN-		
38			
	ÖF	89	
		91	
42	-0 0	92	NH NH
	<u> </u>		

		93	
			-o N-/
			,
45			
46	-ON NH		
47			
48			
49		99	
50			
101	N F		
	0		

	105	

- 31. (Currently Amended) A pharmaceutical composition comprising the modulator compound of claim 1 and a pharmaceutically acceptable carrier.
- 32. (Currently Amended) A pharmaceutical composition comprising the modulator compound of claim 27 and a pharmaceutically acceptable carrier.
- 33. (Currently Amended) A pharmaceutical composition comprising the modulator compound of claim 30 and a pharmaceutically acceptable carrier.
  - 34. (Canceled).
  - 35. (Canceled).
  - 36. (Canceled).
  - 37. (Canceled).
  - 38. (Canceled).